

GOODWIN, PROCTER & HOAR

(A PARTNERSHIP INCLUDING PROFESSIONAL CORPORATIONS)

COUNSELLORS AT LAW

EXCHANGE PLACE

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SDMS DocID

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October 30, 1986

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J.F. Kennedy Federal
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Boston, MA 02203

Superfund Records Center

SITE: Wells C-18

BREAK: 11.9

OTHER: 548832

Dear Lisa:

Enclosed is a copy of a scope of work I have patched together to describe the work John Cherry, Ed Bouwer, and Jeff Lawson expect to carry out beginning next week at the UniFirst property in Woburn. I spoke with John Cherry and Jeff Lawson late this afternoon and confirmed that Jeff will be sending you directly copies of the standard operating procedures to be followed with respect to sampling, analyses, QA/QC, worker safety, etc.

I also confirmed with Jeff and John that both will be on site and available to talk with EPA representatives Monday morning, November 3. Jeff expects to arrive shortly before 8:00 a.m., and John will be arriving from Canada at about 10:00 a.m. Chris Davis will be on site commencing at about 8:30 a.m.

Please do not hesitate to contact me or Chris Davis if you have questions or requests. Consistent with the need I explained to you to proceed in accordance with the schedule laid out in the enclosed scope of work, please be assured that we will do our very best to cooperate with you.

Sincerely,

Jeffrey C. Bates

JCB/dq

Enclosure

cc: Dr. John A. Cherry
Jeffrey T. Lawson, P.G.
Edward J. Bouwer, Ph.D.
Christopher P. Davis, Esq.
Nancer Ballard, Esq.

SCOPE OF WORK

I. Task 1: Install Well to Investigate Up-Gradient Septic Systems as Potential Source.

Four residential dwellings are located within 600 feet to the east of and up-gradient from Wells S71. It is believed that some or all of these dwellings had on-site sewage disposal systems such as leaching fields or cesspools. Among other consumer products, several popular septic system treatment compounds that were available to homeowners and may have been used at these dwellings contained tetrachloroethene ("perc") and/or 1,1,1-trichloroethane. To investigate this potential source, a shallow well will be located at the eastern-most accessible location along UniFirst's southern property line, (UC1 on Figure 1, attached).

Continuous split-spoon samples will be taken from the surface to refusal. All reasonable attempts will be made to reach the top of bedrock. The soil samples will be screened in the field for volatile organic compound content by an informal headspace analysis that will be performed with an HNU or OVA. Selected soil samples from the unsaturated zone will be prepared for laboratory analysis. This well will be screened at the top of rock and be constructed of two-inch, inside-diameter, threaded joint PVC.

This well currently is scheduled to be installed during the week of November 3, 1986, with installation scheduled to commence on November 3, 1986.

II. Task 2: Install Well at Fill Pipe.

Depending on results obtained from Task 1, a shallow well might be installed outside the southeast corner of the UniFirst building, where the fill pipe to the former indoor perc storage tank is located (UC2 on Figure 1). A boring would be drilled adjacent to the building in the fill pipe area. Continuous split-spoon samples would be taken from the surface to refusal. All reasonable attempts would be made to reach the top of bedrock. Soil samples would be screened in the field for volatile organic compound content by an informal headspace analysis that would be performed with an HNU or OVA. Selected soil samples from the unsaturated zone would be prepared for laboratory analysis. A well would be installed in this boring. It would be screened at the top of rock and would be constructed of two-inch, inside-diameter, threaded joint PVC.

Should it be undertaken, this task currently is scheduled to be carried out during the week of November 3, 1986.

III. Task 3: Install Well on the Westerly Side of the Front of the Site, along Olympia Avenue.

Depending on the results from Tasks 1 and 2, a third shallow well might be installed on the westerly side of the front of the site, along Olympia Avenue (UC3 on Figure 1). Along with the shallow well at UC1, this well would bracket Well S71. As described above, continuous split-spoon samples would be taken from the surface to refusal. All reasonable attempts would be made to reach the top of bedrock. Soil samples would be screened in the field for volatile organic compound content by an informal headspace analysis that would be performed with an HNU or OVA. Selected soil samples from the unsaturated zone would be prepared for laboratory analysis. The well would be screened at the top of rock and be constructed of two-inch, inside-diameter, threaded joint PVC.

This well also would be installed during the week of November 3, 1986, should this task be undertaken.

IV. Task 4: Install Multi-Level Groundwater Sampling Well.

Depending on the results of the previous tasks, a five-level groundwater sampling well might be installed adjacent to wells S71 (UC4 on Figure 1). This well would be constructed in two, three-inch diameter bedrock borings, one boring for groundwater sampling and one boring for water level measurements. The borings would be cased with three-inch inside-diameter steel casing through the unconsolidated deposits and socketed into bedrock. The bedrock would be cored to a depth of approximately 100 feet below the surface of the bedrock with a standard rock-coring rig. *2-NX well*

In the borings, multi-level sampling and elevation measuring equipment would be installed by Solinst, Canada Ltd. of Burlington, Ontario. This equipment would be installed such that there would be five equally spaced ports through the length of the bedrock bore. Each sampling port would be separated by a packer to prevent vertical flow of groundwater between the sampling ports.

This task would be performed during the week of November 17, 1986, should it be undertaken.

IV. Task 5: Removal of Underground Fuel Tanks.

As part of UniFirst's general site maintenance activities, the gasoline and diesel fuel tanks that are located at the southeast corner of the property will be removed. The excavation required for tank removal will expose the *EAST* unconsolidated deposits that underlie most of the southwest parking area and adjacent grassy areas along the front of the

lot. The excavation will be visually inspected and screened with an HNU or similar portable organic vapor detector. Should evidence of volatile organic compounds be encountered, samples of the soil will be taken and analyzed.

This work currently is scheduled to be carried out sometime during the first half of December, 1986.

VI. Task 6: Install Bedrock Wells at UC1, UC2 and UC3.

Depending on the results of the previous tasks, three bedrock wells might be installed at locations UC1, UC2 and UC3. The air-rotary drilling technique would be used to install these bedrock wells. An eight-inch hole would be drilled through the soil to a level approximately one foot below the top of rock. Six-inch inside-diameter casing would be installed and grouted in place. The six-inch wells might be drilled to a depth of approximately 20 feet below the top of rock. The wells would be completed by installation of a standard, domestic-supply well submersible pump in the open bedrock bore.

If undertaken, this task would be expected to be commenced during the week of December 15, 1986.

VII. Task 7: Make Hydraulic Measurements.

Depending upon the results of the previous tasks, permeability tests might be run in the newly installed wells and, with EPA permission, wells S70, S71 and S81. Simple rising-head tests would be performed in the two-inch PVC wells by bailing or pumping them down and measuring recovery. The six-inch bedrock wells would be pumped together and individually while water-level measurements were recorded in the bedrock wells and the wells that are screened in the unconsolidated deposits. Disposal of groundwater pumped from these wells could require special handling, and current plans provide for the taking of one tanker-load (5,000 gallons) to CECOS' facility in Connecticut.

If undertaken, this task would be commenced during the week of January 5, 1987.

VIII. Sampling and Analyses.

Selected soil samples from borings and the tank excavation would be analyzed for volatile organic compounds by EPA SW-846 sample introduction method 5020 or 5030 and analysis method 8024. In addition, the organic carbon content would be determined.

The new wells and, with EPA's permission, S71 and S81 would be sampled twice within one month to provide groundwater quality data. The wells would be purged prior to sampling until pH, specific conductance and temperature stabilized. The groundwater samples would be analyzed for dissolved oxygen, dissolved organic carbon, nitrate, sulphate, iron, manganese, sulfide and volatile organic compounds detected by a modification of EPA method 624. This analytical method would be modified to allow separation of the cis and trans isomers of 1,2-dichloroethene. In addition, a shipping and field blank and one duplicate sample would be analyzed during each sampling round.

All samples and analytical work would be conducted by ERT, under the supervision of Dr. John Cherry, Dr. Edward Bouwer and Mr. Jeffrey Lawson. Applicable sampling, analytical, QA/QC and worker safety procedures will be provided under separate cover by ERT.

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10/29/86

